PROJECT DESCRIPTION

GENERAL THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND SHOREFIELD ROAD IN MONTGOMERY COUNTY. MAST ARMS WILL REPLACE THE EXISTING SPAN WIRE STRUCTURES. IN ADDITION, A PEDESTRIAN CROSSING ON THE SOUTH LEG IS PROPOSED. VIDEO DETECTION IS PROPOSED FOR ALL PRESENCE DETECTION. MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR THE SOUTHBOUND APPROACH. THE CONCURRENT MAINLINE AND ALTERNATE SIDE STREET PEDESTRIAN PHASE WILL REMAIN. A SOUTH LEG PEDESTRIAN PHASE IS PROPOSED.

CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER AND ASSOCIATED HARNESSES IN A NEMA SIZE "6" BASE MOUNTED CABINET. THE SHA SIGNAL SHOP WILL INSTALL ONE (I) VIDEO DETECTION INTERFACE FOR 1-4 CAMERAS. THE MONTGOMERY COUNTY SIGNAL SHOP WILL INSTALL ONE (I) 2-WIRE CENTRAL CONTROL UNIT.

THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD OF MONTGOMERY COUNTY AT 240-777-8761 FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. HAMUD WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

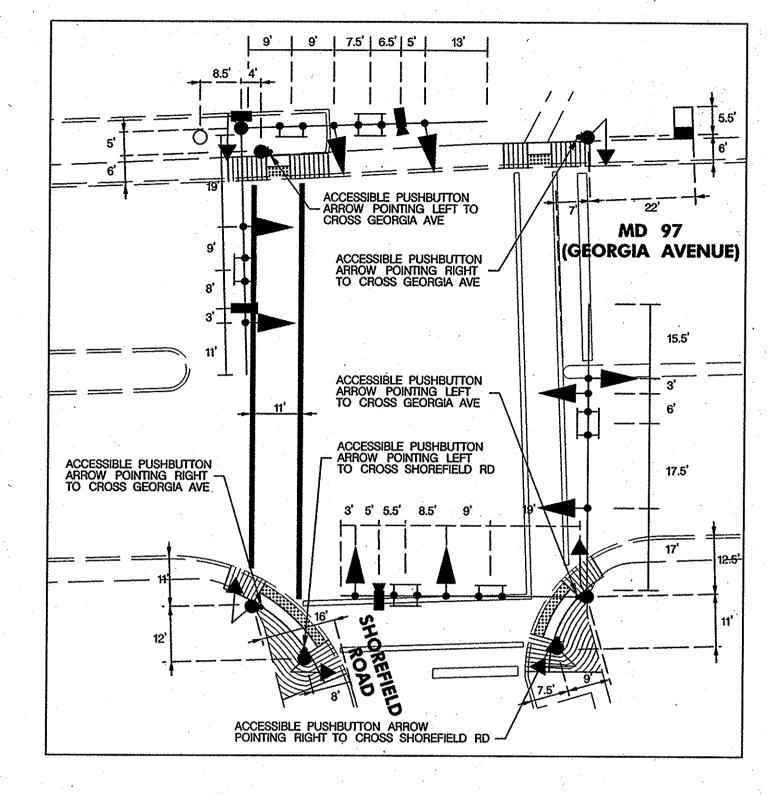
PHASE CHART

				1 1 1 /-	JOE	СП	41/1									
]	2	3	4	5	6	7	8	9	10	11 .	12	13	14	15	
	000	000	88	© ©	8	000	000	000	8	£68	£80	1888	\$100	1488	188	
PHASE 2 & 5	R	R	-G-G	-6 G	G	·R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 5 CHANGE	R	R	G	+ G	G	R	R	R .	R	DW	DW	ÐW	DW	DW	DW	-
PHASE 2 & 6	G	G	G	G	Ģ	R	R	R	R	WK	WK	DW	DW	DW	DW	***************************************
PED. CLEARANCE / COUNTDOWN	G	G	, G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW	. DW	DW	*
PHASE 2 & 6 CHANGE	Υ	Y	Y	Υ	Y	R	R	R	R	DW	DW	DW	DW	DW.	DW	
PHASE 4 & 8	R.	R	R	R	R	G	G	G	G	DW	D₩	,DW	DW	DW	DW	
PHASE 4 & 8 CHANGE	R	R	R	R	R	Y	Υ	Y	Υ	DW	DW	DW	DW	DW	DW	· ·
PHASE 4 & 8 ALT.	R	R	R	R	R	G	G	G	G	DW	DW	WK	WK	WK	WK	1 1
PED. CLEARANCE / COUNTDOWN	R	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	
PHASE 4 & 8 ALT. CHANGE	R	R	R	R	R	Υ	Υ	Ý	Υ	DW	DW	ÐW	DW	Ð₩	DW	→
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	+ +

DIAMETER X 10 FOOT LENGTH.

M-PROPOSED METERED SERVICE PEDESTAL

PROPOSED SIGNAL/PEDESTAL POLE, MAST ARM APS AND PAVEMENT MARKING DETAIL LAYOUT



THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Jeff Wentz Assistant District Engineer - Traffic Phone: 301-513-7358 Mr. Augie Rebish Assistant District Engineer - Utility

Phone: 301-513-7350 Mr. Wayne Mowdy Assistant District Engineer - Maintenance

Phone: 301-513-7304

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

Mr. Edward Rodenhizer Chief, SHA Signal Shop Phone: 410-787-7650

The Power Company Representative is: Potomac Electric Power Company 8300 Old Marlboro Pike Upper Marlboro, Maryland 20772 Phone: 301-961-5325

Montgomery County Department of Public Works Phone: 240-777-8761

Mr. Keith Lord Montgomery County Phone: 301-279-1291

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

QUANTITY ITEM NO DESCRIPTION 9044 LEA [UPDATED] CONTROLLER CABINET SIZE 6 9086 LEA [UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS [UPDATED]\SHEET ALUMINUM MAST 9571 104 SF ARM/POLE MOUNTED SIGN 4 EA - RIO + 3(I), (9 IN. X 15 IN.) POLE MOUNT PUSH BUTTON TO CROSS GEORGIA AVENUE* 2 EA - RIO-3(I), (9 IN. X I5 IN.) POLE MOUNT, PUSH BUTTON TO CROSS SHOREFIELD ROAD* 2 EA - D-3(2) (96 IN. X 16 IN.) DUAL FACED "SHOREFIELD RD" 2 EA - D-3(2) (96 IN. X 16 IN.) DUAL FACED "GEORGIA AVE" I EA - ASSOCIATED SHIELD ASSEMBLY (24 IN. X 51 IN.) "NORTH, MD 97, RIGHT ARROW"

EQUIPMENT LIST 'B'

I EA - ASSOCIATED SHIELD ASSEMBLY (36 IN. X 75 IN.) "SOUTH, MD 97, LEFT ARROW"

I EA - ASSOCIATED SHIELD ASSEMBLY (24 IN. X 51 IN.)

I EA - ASSOCIATED SHIELD ASSEMBLY (36 IN. X 75 IN.)

"SOUTH, MD 97, RIGHT ARROW"

"NORTH, MD 97, LEFT ARROW"

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

	ITEM NO	QUANTITY	DESCRIPTION
	1001	3 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
	2002	8 CY	TEST PIT EXCAVATION
	5004	180 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	6002	1000 SF	4 INCH CONCRETE SIDEWALK
	8000	175 LF	ELECTRICAL CABLE I CONDUCTOR, 250 KCMIL, CU, USE
	8000	I EA	FURNISH & INSTALL POLE MOUNTED "G" SIZE CABINET FOR INTERCONNECT CABLE SPLICING
:	8001	28 EA	12 INCH LED SIGNAL HEAD SECTION
	8002	I EA	2-WIRE CENTRAL CONTROL UNIT
	8004	3 EA	8 INCH LED SIGNAL HEAD SECTION
	8008	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
	8009	5 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
	8014	6 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
	8022	I EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
	8023	I EA	TWIN MAST ARM POLE & 50/60 FT. MAST ARMS ANY "T" DIMENSION
	8025	I EA	TWIN MAST ARM POLE & 50/50 FT. MAST ARMS ANY "T" DIMENSION
	8026		VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT.
	8029	105 LF	12 - PAIR COMMUNICATION CABLE, SELF SUPPORTING OR JELLYFIELD
	8032	210 LF	DISCONNECT, PULL-BACK & REROUTE CABLES
	8034	400 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
	8035	220 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
	8038	70 SF	DETECTABLE WARNING SURFACES
•	8039	104 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
	8041	450 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	8042	I EA	WEATHER HEAD, 3 INCH
	8043	I EA	METERED SERVICE PEDESTAL EMBEDDED
	8045	45 LF	ELECTRICAL CABLE I-CONDUCTOR NO. 4 AWG-THHN/THWN
,	8047	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	8052	I EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
	8054	675 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
	8056	825 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
	8057	900 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
	8065	I EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

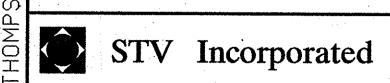
ELECTRICAL CABLE -2 CONDUCTOR (NO.14 AWG)

_ELECTRICAL CABLE -5 CONDUCTOR (NO.14 AWG)

ELECTRICAL CABLE -7 CONDUCTOR (NO.14 AWG)

CONTROL CABLE - 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER

Z NO. 6 AWG STRANDED BARE COPPER GROUND WIRE



engineers /architects /planners /construction managers 7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

785443 AA EXISTING INTERCONNECT CABLE FROM SHOREFIELD ROAD TO ARCOLA AVENUE BB EXISTING INTERCONNECT CABLE FROM SHOREFIELD ROAD TO RANDOLPH ROAD CC REROUTED INTERCONNECT CABLE FROM ARCOLA AVENUE TO SPLICE CABINET PREROUTED INTERCONNECT CABLE FROM RANDOLPH ROAD TO SPLICE CABINET NEW 12 PAIR COMMUNICATION CABLE FROM SPLICE CABINET TO CONTROLLER SF 2 RUNS OF ELECTRICAL CABLE - I CONDUCTOR NO. 4 AWG THHN/THWN PROPOSED UNDERGROUND TELEPHONE SERVICE TO BE INSTALLED BY OTHERS PROPOSED UNDERGROUND POWER SERVICE PPS KCMIL, CU, USE, 3-30 FT. COILS OF SLACK AT UTILITY POLE, FINAL SERVICE CONNECTION TO BE COMPLETED BY PEPCO) PROPOSED GROUND ROD - 3/4 INCH

/ G,H,J,K,L,M, R,S,T,U,V,Z H,S,T,W,Y,Z,EE B,H,S,T,W,Y,Z,EE CC,DD,EE \ A,B,C,D,E,F,G,H,J,K,L,M,R, S,T,U,V,W,X,Y,Z,EE,SF,PPD A,B,C,D,E,F, W,X,Y,Z,EE C,D,E,F,J,K,L, ^l D,K,R,U,V,X,Z

WIRING DIAGRAM

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

DESCRIPTION QUANTITY

785444

4426

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 97 (GEORGIA AVENUE) AT SHOREFIELD ROAD

GENERAL INFORMATION

DATE 3/2007 SCALE NONE CONTRACT NO. AT9155185 MONTGOMERY DESIGNED BY____ COUNTY _ DRAWN BY_ LOGMILE CHECKED BY ____ T.I.M.S. -NO. H488 TOD NO._ F.A.P. NO. DRAWING NO. TS-2017D-GI OF SHEET NO. 2 OF

PLOTTED: THURSDAY, MARCH 29, 2007 AT 08:30 AM
FILE: I:\PROJECTS\0312513\0312513_0047\DRAWINGS\TRA\SHOREFIELD ROAD REBUILD\PSG-P001_SHOREFIELD.DGN